

# TIMELINEZ

Volume 2 Issue 12

December 1984

\$1.00

## Timelinez Index

Vol. 1, Issue 1 (Jul. 1983) to Vol. 2, Issue 11 (Nov. 1984)

Thanks to Bill Miller for this month's index issue. Bill went through all the old Timelinez's and put each article into the index. The index is in date order, beginning with Volume 1, Issue 1, from July, 1983. Each issue is headed by the word TIMELINEZ, followed by the date (YYMM), and the volume and issue numbers. Under the heading, each article is preceded by its page number. If there are several topics covered in one article, then the topics are preceded with astericks.

Bill's hope is to put all Timex/Sinclair articles into a "bulletin board" index. Ideally, people would be able to call up the bulletin board and ask for articles on a given topic or by a given author. The index would be constantly updated by users who would input new references.

To give you a flavor of what Bill is trying to do, I have put this TIMELINEZ index into a VU-FILE database. Tapes will be available from your respective computer clubs. With the VU-FILE database each record is an article. You can search for any string in the database (ie: "modem") and find all articles which reference that string.

If anyone is interested in helping Bill get his bulletin board going, talk to him at your next club meeting (Bill attends just about all the club meetings).

Jim March

## PUG ANNOUNCEMENT OF MEET. CHANGE

Due to a conflict with the Super Bowl, the January 20th meeting of the Peninsula Users Group will start at 10 AM. We hope to see everyone there.

### TIMELINEZ 8307 (Vol. 1, Issue 1)

- P1\* Learning Z80 Assembly Language Programming BY Frank Maura
- P1\* Machine Code Graphics: The TS1000 (and ZX81) Display File BY Joel Brody
- P3\* Programming Tips- Saving Bytes On Your Menus BY Kendrick Smith
- P3\* 'Mastering Your Timex/Sinclair 1000 Personal Computer' Book Review BY David Kinkead
- P4\* PUG News BY George Mockridge
- P4\* EBZUG News BY Rick Link
- P4\* Sinclink News BY Paul Perreault
- P6\* Computer Continuum Product Reports BY Eric Reiter
- \*\*\*\* Fast Fourier Transform
- \*\*\*\* Dual Trace Storage Scope
- \*\*\*\* Printer Plotter
- P7\* ISMOVE: A Simple Moving Graphic in Machine Code BY Joel Brody
- P7\* Mystery Program Explained BY Bob Orrfelt
- P8\* 'TELEPHONE LIST' Program Listing (Part Two) BY ?

Watch next month for part two of the Timex Perpetual Calendar program!

TIMELINEZ (c) is the joint publication of three Timex/Sinclair User Groups in the San Francisco / Oakland / San Jose Bay Areas. Old and new members are always welcome including hardware, software, beginners, experts, etc. We hope to see YOU at our next meeting:

EBZUG 3rd. Thu. Jan. 17 and Feb. 21  
PUG 3rd. Sun. Jan. 20 and Feb. 17  
SVSTUG Last Tue. Jan. 29 and Feb. 26

- TIMELINEZ 8308 (Vol 1 Issue 2)**  
P1\* Timex News  
P1\* Hardware/ Software Reviews  
\*\*\*\* Exatron Stringy Floppy with Interface  
\*\*\*\* Hunter 2K-8K Nonvolatile Memory Board  
\*\*\*\* Z-XLR8 Fast Load Program  
P1\* 'Tell Timex' Contest  
P2\* 64K BYTE Memory Expansion for the TS1000 BY Terry Trigg  
P4\* Rounding Off to 2 Decimal Places for Financial Programs BY Joel Brody  
P4\* INKEY\$ Program Control BY Neil Steckley  
P5\* ZXTALKER Voice Synthesizer for the TS1000 BY Leland Harker  
P5\* Tactile Keyboard Feedback for a Dime BY Henry Pollard  
P6\* Learning Z80 Assembly Language Programming (Part 2) BY Frank Maura  
P9\* EBZUG News BY Joel Brody  
P9\* 'Science and Engineering Programs for the Timex/Sinclair 1000' Book Review BY Henry Pollard  
P10\* 'British Electronics WIZ, Clive Sinclair, Turns Efforts to Developing Electric Car' Article BY David Brand Reprinted from 'The Wall Street Journal'  
P11\* PUG News BY George Mockridge  
P11\* Announcing T.S.U.N.A.M.I. BY Walt Gaby

## PUG ANNOUNCEMENT OF MEET. CHANGE

Due to a conflict with the Super Bowl, the January 20th meeting of the Peninsula Users Group will start at 10 AM. We hope to see everyone there.

- TIMELINEZ 8309 (Vol 1 Issue 3)**  
P1\* Organizer: The Poor Man's Word Processor BY Rick Link  
P1\* Timex News Update BY ?  
P3\* Saving Bytes After a Menu BY Kendrick Smith  
P3\* 'Timex/Sinclair 1000 BASIC Programs in Minutes' Book Review BY Norm Lehfeldt  
P4\* RAM- Pack Wobble Cures BY George Mockridge  
P5\* Tape Loading Problems?- Cures BY George Mockridge  
P5\* Protect Your Computer from Line Transients BY Bob Wilson  
P6\* Public Domain Software BY Henry Pollard, EBZUG Librarian  
P7\* PUG News BY George Mockridge  
P8\* New Timex Software Program Reviews BY Joel Brody  
\*\*\*\* Automobile Analyzer  
\*\*\*\* Solar Water Heater Designer  
\*\*\*\* Guitar for Beginners  
\*\*\*\* Pinball  
\*\*\*\* Merchant of Venus  
\*\*\*\* Real Estate Investment Analysis  
\*\*\*\* Music Educator  
\*\*\*\* Fundamentals of Math  
\*\*\*\* Spelling Bee  
\*\*\*\* Capitalization Master  
\*\*\*\* Language Usage Master

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Texans add local tax.

- TIMELINEZ 8310 (Vol 1 Issue 4)**  
P11\* Timex News Update BY George Mockridge  
\*\*\*\*\* TIMELINEZ gets it's hands on it's first TS2068  
P12\* Amateur Radio BY Teddy E. Helderman  
P13\* 'Tell Timex' Contest Results  
P14\* PUG News BY George Mockridge  
P15\* MTX- 512, World Class Computer from MEMOTECH  
P16\* Information Wanted: Can anyone interface a paper tape punch to a TS1000?  
P17\* Learning Z80 Assembly Language Programming (Part 3) BY Frank Maura  
P18\* 'Your Timex Sinclair 1000 and ZX81' Book Review BY Walter Miller  
P19\* 'The Essential Guide to Timex/Sinclair Home Computers' Book Review BY Jeanette Hancock

TIMELINEZ 8311 (Vol 1 Issue 5)  
P21\* 2000 Update  
P22\* A Low Cost Disk Drive for  
the Timex/Sinclair ZX  
Microdrive Announced  
P22\* Solar Water Heater Payoff  
Program Listing BY Howard  
Collins  
P23\* Learning Z80 Assembly  
Language Programming (Part  
3) BY Frank Maura  
P23\* 'Timex Sinclair Still in  
the Game' BY Kevin  
Anderson Reprinted from  
'USA TODAY'  
P24\* Notice of 'Timex  
Celebration' in Boston on  
Oct. 22. Rita Carr will  
Represent TIMELINEZ  
P25\* PUG News BY George  
Mockridge  
P26\* 'Tell Timex' Contest  
Results (Part 2)  
P27\* SinLink News BY Paul  
Perrault  
P28\* Call for Forth Interest  
Timex Sinclair (F.I.T.S.)  
Special Interest Group BY  
Walt Gaby  
P29\* 'SCOREPAD' Score Keeping  
program listing BY Walter  
E. Johnson

TIMELINEZ 8312 (Vol 1 Issue 6)  
P31\* Head Trauma Alliance Seeks  
Cognitive Rehabilitation  
Software (HELP! ...I can't  
...think of ...the word...)  
BY Richard A. Huxtable  
P33\* A Celebration, October 22,  
1983. A report on the  
Boston T/S Celebration BY  
Rita Carr  
Enclosure\* FORTH interest  
Questionnaire BY Walt  
Gaby

8401 TIMELINEZ (Vol 2 Issue 1)  
P1\* Timex Update  
\*\*\*\* Timex Modem Avail. 'soon'  
\*\*\*\* Timex Micro-Drive Avail.  
'soon'  
\*\*\*\* Timex Bus Expansion Unit  
Avail. 'soon'  
\*\*\*\* Timex 2080 Printer Avail.  
'soon'  
P1\* South Bay T/S User's Group  
\*\*\*\* Richard L. Huxtable of The  
Head Trauma Alliance and  
Billy Skyrme of Timex to  
speak at the January  
meeting  
\*\*\*\* 831219 Dan Ross, Timex  
Computer UP resigns  
P2\* EBZUG Info- American Head  
Trauma Alliance Update  
P3\* TEXTWRITER 1000 TS1000  
Program Review BY Paul D.  
Perrault  
P4\* MEMOTEXT TS1000 Program  
Review BY Norm Lehfeldt  
P5\* WORD SINC II TS1000 Program  
Reviews BY Walt Johnson and  
Dennis J. Krill  
P6\* PUG Membership Directory

8402 TIMELINEZ (Vol 2 Issue 2)  
P9\* Timex Update  
\*\*\*\* January South Bay Meeting  
\*\*\*\* Timex representatives  
announce new products  
\*\*\*\* Timex representatives  
show new products  
P9\* American Head Trauma  
Alliance needs Cognitive  
Rehabilitation Software-  
Contact Walt Gaby  
P10\* South Bay Meeting A  
Success- Attendance over  
130- Dick Huxtable of The  
Head Trauma Alliance  
speaks on the need for  
Cognitive Rehabilitation  
Software BY Rita Carr  
P10\* Zeus Assembler TS2068  
Program Review BY Joel  
Brody  
P11\* Music Library TS1000  
Program Review BY Dennis  
Parker  
P11\* Character Design BY Walt  
Gaby  
P12\* Sinclair QL announcement  
BY Maile Hulihan and  
Dennis Kneale reprinted  
FROM The Wall Street  
Journal  
P13\* Display File Explorer  
TS2068 Program Listing BY  
Joel Brody  
P15\* Solar Water Heater Program  
Review BY Paul D.  
Perrault  
P15\* ZX Spectrum Machine Code  
on the TS2068 Reprinted  
FROM Syntax ZX80

8403 TIMELINEZ (Vol 2 Issue 3)  
P17\* Timex Quits But We'll Go  
On  
P17\* T/S Users at the Computer  
Faire  
P18\* Timex Sinclair Color  
Graphics by Nick Hampshire  
A Book Review BY Walt Gaby  
P19\* Character Editor Program  
Listing by Nick Hampshire  
P20\* Card Games BY William  
Gordon  
\* Shuffle Routine Program  
Listing BY William Gordon  
P22\* TS1000 Parts Prices  
\* TS1016 Parts Prices  
\* Parts Order Form  
P23\* SIning and Filling-in on  
the TS2068 BY Joel Brody  
P24\* Books about the TS1000 and  
Memotech 32K Memory Review  
BY Michael Wiesenberg FROM  
Dr. Dobb's Journal 8312  
P25\* Joystick Patch For Timex  
Frogger

8404 TIMELINEZ (Vol 2 Issue 4)  
P27\* 2 page TIMELINEZ mailed  
with sample issue of T-S  
Horizons  
P27\* Computer Faire Report  
(brief) BY Bill Miller  
P28\* A keyword table for the  
TS2068 BY Henry Polard  
Attachments  
\* T-S Horizons  
\* Sunset Electronics Flyer

8405 TIMELINEZ (Vol. 2 Issue 5)  
 P29\* Timex Update BY Rita Carr  
 \*\*\*\*\* 840424 Trinity Magnum?  
 Dan Higgenbottom?  
 \*\*\*\*\* General Electric is  
 trying to buy Timex  
 Computer Corp. rights?  
 \*\*\*\*\* Radio Shack's TP-10  
 thermal printer paper  
 really works great with  
 the TS2040 printer. The  
 print is darker and it  
 sells for \$3.95 for 2  
 rolls. (FROM C. Raynak of  
 the Cleveland TS Users  
 Group)  
 P29\* Timex trade-in offer from  
 Memotech  
 P30\* A&J Microdrive Stringy  
 Floppy for Timex 1500  
 Hardware Review BY R.L.  
 Huxtable  
 P32\* TV Computer Program  
 Schedule BY Bill Miller  
 P32\* Sinclair QL Update  
 P34\* Rita Carr's Newsletter  
 Exchange  
 \*\*\*\*\* Taming the bug in TS2068  
 UU-CALC BY Gary Szekeres  
 OF The T/S Users Group of  
 Cincinnati  
 \*\*\*\*\* Darken up the Display  
 File (and Print Out)  
 Program Listing FROM The  
 Triangle Timex Users  
 Group  
 \*\*\*\*\* Some Names at Timex FROM  
 The Boston Computer  
 Society  
 P35\* Game Scoreboard Program  
 Listing BY Kendrick Smith  
 P36\* Inverting Screen Display  
 BY William Gordon  
 P38\* Interfacing an electric  
 typewriter to a ZX81 BY  
 Vivian Nelson Mitchell

8406 TIMELINEZ (Vol. 2 Issue 6)  
 P39\* T/S Users Meet On  
 Compuserve BY Norm  
 Lehfeldd (Compuserve ID #  
 72466,3237)  
 P40\* TS2068 WP32 Word Processing  
 Program by Bob Orrfelt  
 Review BY Walt Gaby  
 P41\* T/S Hosted System BY Rick  
 Johnson  
 P41\* Timex announces schematic  
 and Technical Manual for  
 TS2068  
 P41\* Timex Survivors Flyer FROM  
 Games to Learn By, Inc  
 P42\* Undocumented Z-80  
 Instructions BY Frank  
 Maura  
 P44\* Computer Faire Report BY  
 Bill Miller  
 P45\* Write an article for  
 TIMELINEZ using DATA  
 statements BY Bill Miller  
 P45\* Inverting Screen Display-  
 Program Errors BY Pete  
 Sadler  
 P45\* Getting Acquainted BY Bill  
 Miller

P45\* ESFOA ST SIG (Exatron  
 Stringy Floppy Owners  
 Association, Sinclair  
 Timex Special Interest  
 Group)  
 \*\*\*\*\* Convert your CAI 2K ROM  
 Stringy Floppy to work  
 with the 4K ROM A&J  
 Interface BY Bill Miller  
 P45\* Tree-Forth Users BY J.  
 Cohen  
 P45\* Update BY Rita Carr  
 \*\*\*\*\* Brian Leary, Energy  
 Management Rep. from PG&E  
 spoke at the May meeting  
 on home energy management/  
 security systems using a  
 personal computer.  
 \*\*\*\*\* Bob McDonahy of  
 Washington DC area is  
 building an interface to  
 go under the TS2068  
 \*\*\*\*\* FROM Dick Wagner OF  
 Oregon- Usefull POKEs for  
 the TS2068  
 P45\* Heard in the alley BY Bob  
 Orrfelt  
 \*\*\*\*\* TS2068 Cartridge from  
 ASTEC?  
 \*\*\*\*\* Repair parts for TS2040  
 from Alphacom?  
 \*\*\*\*\* Stringy Floppies  
 (WAFADRIE?) from Hong  
 Kong?  
 \*\*\*\*\* Trinity Magnum? Dave  
 Higgenbottom?

## NEW LIFE FOR YOUR TS2068?

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- 8407 TIMELINEZ (Vol 2 Issue 7)
- P47\* Modem owners- List TS computer owners who also own modems BY Walt Gaby
- P47\* T/S Beats IBM BY Bob Orrfelt
- P48\* Scrabble Score Program Listing BY Kendric C. Smith
- P50\* T/S 1000 Programs on the TS2068 BY Norm Lehfeldt
- P52\* Nationwide Software Collection Proposal BY Frank P. Dunkelberg
- P53\* SCREEN- SOLU electronic worksheet description FROM Banta Software
- P53\* Zebra Systems BBS for TS users 212 296-2229
- P54\* War in the East Game Program Review- Rated Excellent BY Donald H. Marks

- 8408 TIMELINEZ (Vol 2 Issue 8)
- P55\* T/S Update
- \*\*\*\*\* TS2068 Spectrum Emulator available from Doug Dewey
- \*\*\*\*\* TS2068 Game Cartridges available from Sunset Electronics
- \*\*\*\*\* TIMEX inventories sold to liquidator
- \*\*\*\*\* TS2040 & TS1500 Schematics (drawn by Bob Orrfelt, traced by Jim Levey) available
- \*\*\*\*\* BBS for all Timex users 304 652-1416
- \*\*\*\*\* T-S Horizons (No. 6) has a review of Bob Orrfelt's UP-32 written BY Walt Gaby
- \*\*\*\*\* SRL UK says it will sell 600 48K ZX Spectrums to a Chinese College
- \*\*\*\*\* Sync Ware News is a new publication from Tom Woods
- \*\*\*\*\* Computer Trader Magazine has a section on TS computers
- \*\*\*\*\* Computer Shopper has a TS section BY Mark Fendrick (Compuserve EMAIL 74216, 1245)
- P56\* Hidden Word Puzzle Generator Program Listing BY George Mockridge
- P60\* The Jungle Jim BY Jim March
- \*\*\*\*\* Addition of Strings
- P61\* Rita Carr's Newsletter Exchange
- \*\*\*\*\* From THE RAMTOP
- \*\*\*\*\* Tips on typing in TS2068 programs BY Darrell Geiger
- \*\*\*\*\* FROM John Peterson OF South Bay Computer Club
- \*\*\*\*\* Non-Breakable Programs TS2068 Back-Up Copies
- P61\* Convert your CAI Stringy Floppy to store variables with the BASIC program just as the cassette does BY Bill Miller

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| FORTY NINER: \$18.95           | SCUBA DIVE                |
| KEYBOARD: \$22.95              | JUNGLE TROUBLE            |
| ROCKET MAN: \$18.95            | \$19.77 each              |

TS2068 - PRO GOLF: \$14.95

**ALL PRICES ARE IN CANADIAN FUNDS**

P.O. BOX 84, Dept. 13, AGINCOURT, ONTARIO, CANADA M1S 3B4

- P61\* In and out of CAPS mode from within program for TS2068 program listing BY Walt Gaby
- P61\* The First Bug BY Navy Capt. Grace Hopper
- P62\* A complete graphics package for the TS2068 (Graphist) Software Review

- 8409 TIMELINEZ (Vol 2 Issue 9)
- P63\* TIMELINEZ gets it's hands on a 'WAFADRIPE' prototype (Dual Stringy Floppy, RS-232 port, Centronics style port Unit for the ZX Spectrum) Contact Bill Miller
- P63\* T/S on-line- TS2050 Modem, Compuserve, and BBS report BY Joel Brody
- P63\* Usefull POKES for the TS2068 BY George Mockridge
- P66\* Rita Carr's Newsletter Exchange
- \*\*\*\*\* FROM COAT/S
- \*\*\*\*\* Breaking and saving programs on the TS2068 BY Dennis Jurries
- \*\*\*\*\* FROM Susan Hiatt in Ohio
- \*\*\*\*\* Convert Binary Numbers to Decimal on the TS2068
- \*\*\*\*\* FROM ATSU NL (in central Ohio) BY David Mosher- Unbreakable/ Unstopable program listing?
- P66\* TS2068 User's Guidebook lists over 250 products for the TS2068 and over 80 dealers still supporting it FROM T.S. Services
- P66\* Linda Banta of Banta Software Sends two programs to tell if TS2040 is on or off
- P77\* The Jungle Jim BY Jim March
- \*\*\*\*\* The GOTO statement
- \*\*\*\*\* How the computer stores a program line in memory
- P66\* Spectrum Emulator/ Chameleon News BY Rick Link OF EBZUG
- P70\* Graphing Data: Part I BY Donald H. Marks



**EBZUG**  
East Bay Z80 User Group  
654 40th Street  
Richmond, CA 94805  
(415) 234-3310 or 531-6566

**PRESIDENT** Joel Brody  
**NEWSLETTER EDITOR** Rick Link

EBZUG meets the third Thursday of each month at:

WEST BRANCH BERKELEY PUBLIC LIBRARY at the corner of University and San Pablo. Meetings start at 7:30 pm. Bring equipment and power strips.

### UPCOMING MEETINGS:

No December Meeting

January 17, 1985

February 21, 1985



**PENINSULA USER GROUP - PUG**  
263 Gateway No. 107  
Pacifica, CA 94044  
(415) 359-3198 or 333-2231

**PRESIDENT** George Hockridge  
**LETTER EDITOR** George Hockridge

PUG meets the third Sunday of each month at:

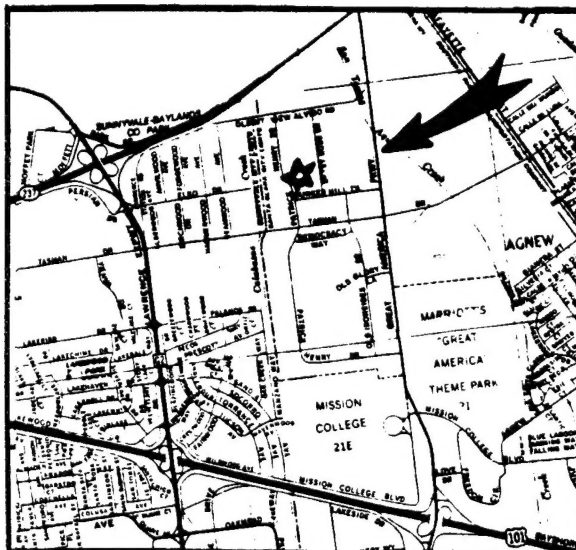
PENINSULA HOSPITAL, 1783 EL CAMINO, BURLINGAME. 1 pm. Meet room on lower level. Use North entrance. Bring equip. & extension cords if possible.

### UPCOMING MEETINGS:

No December Meeting

January 20, 1985 (10 AM)

February 17, 1985



**Silicon Valley SINCLAIR/IBEX**  
User Group (SVS/IBUG)  
P.O. BOX 4133  
Santa Clara, CA 95054-0133  
(408) 738-2888 X4536

**PRESIDENT** Rita Carr  
**NEWSLETTER EDITOR** Bill Miller

SVS/IBUG meets the last Tuesday of each month at:

Dysan Corp. Headquarters  
5201 Patrick Henry Drive  
Santa Clara, CA

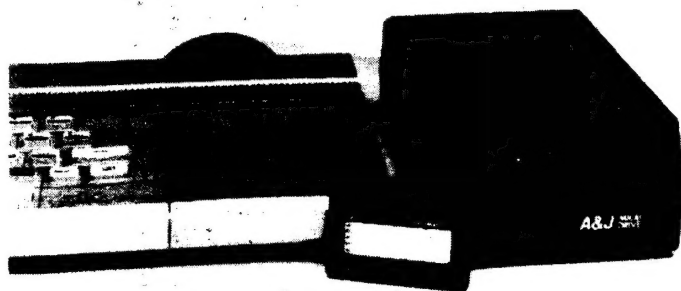
(Please use North entrance by the loading dock)

### UPCOMING MEETINGS:

No December Meeting

January 29, 1985

February 26, 1985

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|        | Add \$6.50 Shipping Charges   |           |
| 830017 | MODEL 2000 OWNER'S MANUAL _____   | 4.95      |
| 820040 | MODEL 2000 DRIVE 2 _____  | 124.50    |
| 900001 | 10' MICRO WAFER II _____  | 4.25      |
| 900002 | 20' MICRO WAFER II _____  | 4.25      |
| 900003 | 35' MICRO WAFER II _____  | 4.50      |
| 900004 | 50' MICRO WAFER II _____  | 4.75      |
| 900005 | 62' MICRO WAFER II _____  | 4.75      |
| 850001 | WAFER ORGANIZER (Folder holds 16 wafers) _____  | 5.00      |
| 850002 | WAFER CADDY (Desk Top Tray Holds 6 wafers) _____  | 9.95      |
| 850003 | WAFER WHEEL (Desk Top Wheel Holds 30 wafers) _____  | 18.75     |

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8410 TIMELINEZ (Vol 2 Issue 10)  
P71\* Word Processor can be customized by TS1000/ 1500 users- Word Processor Program Review BY Norm Lehfeldt  
P72\* The Jungle Jim- ROM character generator Part I BY Jim March  
P73\* Rita Carr's Newsletter Exchange  
\*\*\*\*\* FROM BCSTSNL (Boston Computer Society T/S Newsletter)  
\*\*\*\*\* Password Security- Program Listing BY John Kemeny  
\*\*\*\*\* FROM CPT Charles R. Byler  
\*\*\*\*\* Stop Auto- running ZX81/ TS1000 Programs  
\*\*\*\*\* Get a ZX Spectrum ROM from the UK for about \$9  
\*\*\*\*\* FROM EBZUG- Mike Minutoli  
\*\*\*\*\* Banta Software 'Is The Printer on or off' Listing for the TS1000 (P66) error  
\*\*\*\*\* FROM SALUSAPR- Mary Reinman  
\*\*\*\*\* Sinclair Research Ltd. Expands- Opens New Offices in Middle East and South East Asia  
\*\*\*\*\* Sinclair's current computer production exceeds 150,000 units per month  
\*\*\*\*\* QL has been sold by mail order in UK for six months  
\*\*\*\*\* FROM CATS (Capital Area TS users group)  
\*\*\*\*\* A cozy nook for machine code in the TS2068 BY ?  
P76\* 8-16K Switch for Cheetah 64K RAM Packs BY Doug Hoiles  
P77\* Program listing for graphing data: Part II BY Donald H. Marks

8411 TIMELINEZ (Vol 2 Issue 11)  
P79\* Pay Off That Debt! Loan amortization program BY Walt Gaby  
P79\* Changing The Guard- Jim March takes over as TIMELINEZ Managing Editor  
P80\* The Jungle Jim- Character Display, Part II and PAUSE BY Jim March  
P81\* Pattern Generator Helps Adjust Color TV Sets and Monitors BY Norm Lehfeldt  
P81\* How to adjust TS2068 color, to remove 'tear' and to remove 'character bleeding' or 'crawlies' BY George Mockridge  
P82\* EBZUG Swap Meet Report  
P84\* Double size letters for Bob Orrfelt's WP-32 Word Processor Program BY Walt Gaby  
P85\* More Information From Rita Carr's N/L Exchange Program  
\*\*\*\*\* From T/S Services N/L  
\*\*\*\*\* Aerco- Tasword Two Patch  
\*\*\*\*\* TS2050 MODEMS vs Power Strips  
\*\*\*\*\* TS Maintenance News  
\*\*\*\*\* From T/S Users Group of Cincinnati  
\*\*\*\*\* Corrections to TS2068 Technical Manual  
\*\*\*\*\* Public Domain Software Exchange Offer  
\*\*\*\*\* From SUM (S/T Users Magazine)  
\*\*\*\*\* How to use a large Bit Mapped Graphics Printer with the TS2050 Modem and Aerco interface  
\*\*\*\*\* From T/S Users Group of Vancouver  
\*\*\*\*\* Find the Area of an irregular space with your ZX81- Program Listing  
P86\* Timex Perpetual Calendar Program Listing (Lines 475-800 are missing) BY Jay Brockman

Managing Editor Jim March  
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